step of acquiring images of the plurality of anatomical parts includes the step of moving at least one device along the scanning trajectory.

- 12. (New) A method as claimed in claim 6, further comprising the step of generating a scanning trajectory using the optimum projection line determined for each anatomical part in the region of interest, prior to the acquiring images step.
- 13. (New) A method as claimed in claim 9, wherein the x-ray source and x-ray detector are moved along a scanning trajectory for acquiring the images.
- 14. (New) A method as claimed in claim 10, further comprising the step of generating a scanning trajectory prior to the step of acquiring images, and wherein the step of acquiring images of each of the vertebrae includes the step of moving at least one device along the scanning trajectory.